SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. 95 Silo Drive * Rocky Hill * Connecticut * 06067 * (203) 272-7837 * ssesinc@yahoo.com

John Jones	SSES Job No: 2020/16-27A-CT-SOM
56 Ninth District Road	Client Job No:
Somers, CT 06071	
	Site Inspection Date: February 14 & 20, 2020
ROJECT TITLE AND LOCATION: 186	Stebbins Road, Somers, CT
ENTIFICATION OF WETLANDS AND WATER	
WETLANDS AND WATERCOURSES PR	RESENT ON PROPERTY: Yes XX No
Wetlands: Inland Wetlands X	X Watercourses: Streams
Tidal Wetlands	Waterbodies
Remarks: Gillettes Brook flows in a we	sterly direction just southwest of the site.
EGETATION COMMUNITIES PRESENT IN WE	<u>TLANDS</u>
Forest_XX_ Sapling/Shrub_XX W	et MeadowXX MarshField/Lawn_XX
OIL MOISTURE CONDITION	WINTER CONDITIONS
Dry	Frost Depth: None inches
Moist XX	Snow Depth: None inches
Wet	
ervice and the State Soll Legend were used in the ndersigned Registered Soil Scientist. A sketch in If welland markers, watercourses and soil types in	ntive Soil Survey, USDA, Natural Resources Conservation his investigation. The investigation was conducted by the map showing wetland boundaries and the numbering sequen in both wetland and non-wetlands are included with this reporting have been located/plotted by the surveyor, it is
fter the wetland boundary and/or watercourse fla	ent to our tirm for review. All wetland boundary lines clentist are subject to change until officially adopted by local
fter the wetland boundary and/or watercourse flac ecommended that a copy of the survey map be s stablished by the undersigned Registered Soil S	ent to our tirm for review. All wetland boundary lines clentist are subject to change until officially adopted by local
fter the wetland boundary and/or watercourse flac ecommended that a copy of the survey map be s stablished by the undersigned Registered Soil S	ent to our tirm for review. All wetland boundary lines clentist are subject to change until officially adopted by local
fter the wetland boundary and/or watercourse flat ecommended that a copy of the survey map be s stablished by the undersigned Registered Soil S tate or federal regulatory agencies. Respectfully Submitted by	clentist are subject to change until officially adopted by local
fter the wetland boundary and/or watercourse fla ecommended that a copy of the survey map be s stablished by the undersigned Registered Soil S tate or federal regulatory agencies.	clentist are subject to change until officially adopted by local

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive * Rocky Hill * Connecticut * 06067 * (203) 272-7837 * ssesinc@yahoo.com

WETLANDS/WATERCOURSES AND SOIL REPORT

PROJECT TITLE AND LOCATION: 186 Stebbins Road, Somers, CT

NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS:

WF#1 thru 13

14 thru 26

27 thru 36

Plot and locate Gillettes Brook as shown on sketch map.

SOILS SECTION:

Soil Legend: State Soil Number/County Soil Symbol, Soil Series Name, Taxonomic Class & Brief Description.

WETLAND SOILS

- Walpole sandy loam (Aeric Endoaquepts)- This is a deep, poorly drained, friable, coarse-loamy textured soil that developed over sandy and gravelly, glacial outwash. Outwash soils occur in valleys, outwash plains and terraces.
- Fluvaquents-Udifluvents This soil map unit consists of well drained to very poorly drained, nearly level soils that formed in very recent alluvium deposited by rivers and streams. The soils are occasionally to frequently flooded, which often results in stream scouring, lateral erosion and shifting of soil from place to place. Soil characteristics, such as texture and stoniness, are usually highly variable within short distances.

NON-WETLAND SOILS

- Ninigret and Tisbury soils (Aquic Dystrudents) These are deep, moderately well drained, friable, coarse loamy and loamy textured soils that developed over sandy and gravelly, glacial outwash derived from schist, gnelss and granite. Outwash soils occur in valleys, outwash plains and terraces.
- Merrimac sandy loam (Typic Dystrudepts) This is a deep, somewhat excessively drained, friable, sandy textured soil that developed over sandy and gravelly, glacial outwash derived from schist, gnelss and granite. Outwash soils occur in valleys, outwash plains and terraces.
- Manchester gravelly sandy loam (Typic Udorthents) This is a deep, excessively drained, reddish-colored, gravelly sandy textured soil that developed over sandy and gravelly, glacial outwash derived from sandstone, shale and basalt. Manchester soils occur in valleys, outwash plains, terraces, kames and eskers landforms:
- 306 <u>Udorthents-Urban land complex</u> This map unit consists of extensive areas where soils have been disturbed from land development along with large areas of impervious surfaces associated with streets, parking lots, buildings and other structures.
- 308 <u>Udorthents, smoothed</u> This is a well drained to moderately well drained soil area that has had two or more feet of the original soil surface altered by filling, excavation or grading activities. Udorthents, smoothed soils commonly occur on leveled land and fill landforms.

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

95 Silo Drive * Rocky Hill * Connecticut * 06067 * (203) 272-7837 * ssesinc@yahoo.com

DEFINITIONS AND METHODOLOGY FOR IDENTIFICATION OF STATE REGULATED WETLANDS & WATERCOURSES

Wetlands and watercourses are regulated in the State of Connecticut by the Connecticut General Statutes, Chapter 440, sections 22a-28 to 22a-45. The Statutes are divided into the Inland Wetlands and Watercourses Act (sections 22a-36 to 22a-45) and the Tidal Wetlands Act (sections 22a-28 to 22a-35). Inland Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture" section 22a-38(15).

Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private which are contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation" section 22a-38(16).

Tidal Wetlands are defined as "those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all of the following:" (includes plant list) section 22a-29(2):

METHODOLOGY FOR IDENTIFICATION OF SOILS, WETLANDS & WATERCOURSES

- 1) SOILS IDENTIFICATION: Soils are investigated by digging test holes with a spade and auger. Test holes are typically dug to depths of between 15 and 40 inches. Based on soil features, including coloration patterns, texture and depths to restrictive layers, the soils are identified by soil series name utilizing the classification system of the National Cooperative Soil Survey. Soil series map numbers correspond with the State Soil Map Legend established by USDA, NRCS in the State of Connecticut Soil Survey. For further soils information, refer to the NRCS website for CT: www.ct.nrcs.usda.gov
- 2) INLAND WETLAND DELINEATION: Soil test holes and borings are made in selected areas in order to determine the lateral extent of Inland Wetlands. The boundaries of the Inland Wetlands are identified in the field and delineated with consecutively numbered survey tapes, unless instructed by the client to only map wetland boundaries for planning purposes. The approximate locations of the wetland boundaries are hand drawn onto a map and are included with the wetlands report.
- 3) <u>IDENTIFICATION OF WATERCOURSES</u>: Very often the locations of ponds, streams and rivers are already shown on a survey map, If a watercourse is absent from a survey map, then survey tapes, labeled "watercourse" or "intermittent watercourse" are placed along the channel and the approximate location of the watercourse is also sketched onto the map.
- 4) TIDAL WETLANDS DELINEATION: Tidal Wetlands are identified based on a predominance of tidal wetland plants and observation of physical markings or water laid deposits resulting from tidal action. Tidal Wetland boundaries are delineated by locating the upland limits of those plants listed in section 22a-29(2) to the extent that these plants reflect inundation by tides.

